



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/599,724

06/15/2007

Nicolas Gaillard

1759.235

3297

23405

7590

09/25/2009

HESLIN ROTHENBERG FARLEY & MESITI PC
5 COLUMBIA CIRCLE
ALBANY, NY 12203

EXAMINER

PEZZUTO, HELEN LEE

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

09/25/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/599,724	Applicant(s) GAILLARD ET AL.	
	Examiner Helen L. Pezzuto	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Applicant's amendment to claims 1-2, 7, 15, and the addition of claims 18-20 filed in the response on 5/6/09 is acknowledged. Upon further consideration, Oswald et al. (US-853) is withdrawn as an applied reference as it does not fairly suggest the recited R7 substituent in the cationic monomer. Currently, claims 1-11, and 13-17 are pending in this application.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11 and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albrecht et al. (US-887) or Schinabeck et al. (US-760) in view of Albrecht et al. (US-887).

US 6,187,887 to Albrecht et al. discloses water-soluble or water-swellaible copolymer comprising structural units a), b), c), and d) as defined in formula (I), (IIa)

Art Unit: 1796

and/or (IIb), (III), and (IV), respectively, encompassing the instant anionic, non-ionic, cationic and additional monomeric recurring units (col. 2, line 40 to col. 4, line 44; col. 5, lines 9-21; working Examples). Prior art further suggests incorporating 0.0001-50 mol% of crosslinking monomers (col. 4, lines 48-64), and other structural component (e) including (meth)acrylic acid, which further embraces the instant anionic monomers (col. 4, line 65 to col. 5, line 8). The respective proportions of the various monomeric components are within those expressed in the present claims, with a preferred amount of 40-80 mol% (a) and 2-30 mol% (c), meeting the recited $y > x$ limitation (col. 5, lines 9-15). The resultant copolymer has a number average molecular weight of 50,000 to 5,000,000, and is taught to have utilities as additives in aqueous building materials, water-based paints and coating systems (see abstract; col. 5, lines 16-21; col. 6, line 66 to col. 7, line 3). US-887 suggests using 0.05-5 wt% of the resultant copolymer based on the dry weight of the construction material, paint or coating system (col. 7, lines 4-9).

US 7,238,760 to Schinabeck et al. discloses water-soluble or water-swellaable copolymer comprising structural

Art Unit: 1796

units a), b), c), and d) as defined in formula (I), (IIa) and/or (IIb), (IIIa), and (IV), respectively, embracing the instant anionic, non-ionic, cationic and additional monomers (col. 3, line 20 to col. 6, line 30; working Examples). The respective proportions of the various monomeric components are within those expressed in the present claims, with a preferred amount of 40-80 mol% (a) and 2-30 mol% (c), meeting the recited $y > x$ limitation (col. 5, lines 9-15). The carboxylic acid group/acrylic acid containing anionic monomer expressed in claims 18 and 19 also fall within the scope of prior art structure (IIb), wherein R^7 can be a carboxylic acid group (col. 4, lines 28-52). The resultant copolymer has a number average molecular weight of 50,000 to 20,000,000, and is taught to have utilities as additives in aqueous building materials, water-based paints and coating system (see abstract; col. 6, lines 34-38; col. 8, line 45-49). US-887 suggests using 0.05-5 wt% of the resultant copolymer based on the dry weight of the construction material, paint or coating systems (col. 8, lines 50-53). US-760 does not expressly exemplify the use of a crosslinking agent, but does, however, disclose the possible need for low degree of crosslinking (col. 7, lines 23-26) . Analogous US-887

Art Unit: 1796

specifically discloses using 0.0001 to 50 mol% of a crosslinking agent as required in specific application, including diacrylates and methylene-bis-acrylamide as expressed in the present claims. Accordingly, it would have been obvious to one having ordinary skill in the art to incorporate a crosslinker as required by specific application, motivated by the reasonable expectation of success as taught by US-887.

Since prior art references teach all the recited monomers within the relative proportions expressed in the present claims, it would have been obvious to one having ordinary skill in the art to prepared an associative amphoteric polymer containing the recited recurring units, motivated by the reasonable expectation of success. Regarding the newly recited "consisting essentially of" in claim 1, the examiner is of the position that applicant has not provide evidence showing the inclusion of prior art additional recurring unit would materially affect the basic novel characteristics of the claimed invention. Furthermore, one having ordinary skill in the art would expect that upon elimination of prior art additional recurring unit, the consequence would be the loss of its function. Thus, rendering obvious the present claims.

Response to Arguments

Applicant's amendment and arguments filed considered. The crux of applicant's argument lies in Albrecht and Schinabeck requires four separate monomeric components as opposed to applicant's polymer consisting essentially of only three monomer components. This is not found to be compelling as applicant has not shown the inclusion of prior art 4th monomeric component would affect the basis novel characteristic of the claimed invention. Moreover, as stated above, the omission of prior art 4th monomeric component with consequent loss of its function is obvious. Accordingly, the examiner's position is maintained.

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 1796

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen L. Pezzuto whose telephone number is (571) 272-1108. The examiner can normally be reached on 8 AM to 4 PM, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Helen L. Pezzuto/
Primary Examiner
Art Unit 1796

hlp